## Plant Guide



# ERECT DAYFLOWER

#### Commelina erecta L.

plant symbol = COER

Contributed by: USDA NRCS Kika de la Garza Plant Materials Center



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### Alternate Names whitemouth dayflower

#### Uses

Erect dayflower is said to be a preferred food source for white-tailed deer (Chamrad & Box 1968; Drawe 1968), so it is a good plant to consider when establishing deer food plots. Erect dayflower is also grazed by cattle (Everitt, Drawe, & Lonard 1999). In addition, its seeds are eaten by bobwhite quail, white-winged doves, and mourning doves (Everitt, Drawe, & Lonard 1999). Erect dayflower can also be a good plant for native area restoration projects.

#### **Status**

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

#### **Description**

*General*: Erect dayflower (*Commelina erecta*) is a native, perennial, warm-season forb. A member of the spiderwort (Commelinaceae) family, erect

dayflower is said to be named for the three Commelin brothers who were all Dutch botanists, although only two were productive in their field. Erect dayflower's two larger petals are said to represent the two Commelins who were published, while the third inconspicuous petal represents the unpublished brother (Ajilvsgi 1991).

Erect dayflower has a showy blue flower that is attractive, but ephemeral. Erect dayflower starts out erect, becoming decumbent as it matures (Correll & Johnston 1996). There are three varieties: erecta, deamiana, and angustifolia. Plants are highly variable and the individual varieties are difficult to distinguish (Gleason & Cronquist 1991). Erect dayflower is often considered a weed (Correll & Johnston 1996), especially in rice fields.

*Distribution*: For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

*Habitat*: Erect dayflower can grow in both sandy and clayey soils in almost all habitats (Ajilvsgi 1991). It is found along streambanks, in gardens, on prairies, along roadsides, and in waste places (Jones 1982).

#### Adaptation

Erect dayflower can be found from New York and Wisconsin south to Arizona and Florida, west to Wyoming, and throughout most of the eastern United States. Variety *erecta* extends throughout most of the range of the species, while *angustifolia* is primarily found in Texas, and *deamiana* grows on sand dunes from Indiana and southern Michigan to Nebraska and is sometimes found as far south and west as Texas and Arizona (Gleason & Cronquist 1991).

#### **Establishment**

Erect dayflower can be grown from cuttings or seed. An informal germination test conducted in the greenhouse at the Kika de la Garza PMC yielded a germination average of 87% with approximately twelve hours of daylight at 75 to 85°F and twelve hours of darkness at 50 to 60°F. Cuttings of dayflower had about an 80% survival rate with one node and three node stem cuttings. It is recommended that a rooting hormone be used to encourage rapid rooting. Cuttings and seedlings can be transplanted in 6 to 8 weeks. Irrigation is recommended, although not critical, at drier sites to help the young plants get established. It is recommended that young plants be at least 6 inches in height before transplanting.

The use of plastic plant shelters is beneficial to protect young plants from heavy grazing, reduce plant competition, and create a more beneficial microclimate until young plants can get established.

#### Management

Weed control is a problem in a dayflower plot as the leggy plants make it difficult to remove the weeds without removing the plants. A weed mat is recommended for situations, such as seed or plant production plantings, where weed control is a necessity. In other situations, such as deer food plots, weed control may not be an issue. Irrigation is recommended during drier periods for seed and plant production plantings.

#### Seeds and Plant Production

The seed of erect dayflower is easy to process once harvested. However, the prostrate and indeterminate growth form of erect dayflower results in harvests of very small quantities of seed. This makes commercial production of large quantities of seed uneconomical, and limits its use for large-scale seedings and plantings.

#### References

Ajilvsgi, G. 1984. *Wildflowers of Texas*. Shearer Publishing, Fredericksburg, TX.

Chamrad, A.D. & T.W. Box 1968. "Food habits of white-tailed deer in south Texas." *Journal of Range Management* 21: 158-164.

Correll, D.S. & M.C. Johnston 1996. *Manual of the Vascular Plants of Texas*. The University of Texas at Dallas, Richardson, TX.

Drawe, D.L. 1968. "Mid-summer diet of white-tailed deer on the Welder Wildlife Refuge." *Journal of Range Management* 21: 164-166.

Everitt, J.H., D.L. Drawe, & R.I. Lonard 1999. *Field Guide to the Broad-Leaved Herbaceous Plants of South Texas: Used by Livestock and Wildlife.* Texas Tech University Press, Lubbock, TX.

Gleason, H.A. & A. Cronquist 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 2<sup>nd</sup> edition. The New York Botanical Garden, Bronx, NY.

Jones, F. B. 1982. *Flora of the Texas Coastal Bend*. Welder Wildlife Foundation, Sinton, TX.

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